

WHAT IS CLAIMED IS:

1. A balloon catheter comprising:

a long-sized body extending between a proximal end and a distal end, said body internally having at least one lumen; and

a balloon made from a composite material composed of short-fibers for reinforcement and a matrix resin, said balloon being disposed on the distal side of said long-sized body;

wherein said short-fibers are oriented in said balloon in such a manner that in a longitudinal cross-section of said balloon, 25% or more of said short-fibers are oriented in the major-axis direction of said balloon, 25% or more of said short-fibers are oriented in the direction oblique to the major-axis direction, and the remaining short-fibers are oriented in the direction nearly perpendicular to the major-axis direction; and in a diametrical cross-section of said balloon, 8% or more of said short-fibers are oriented in the circumferential direction of said balloon, 25% or more of said short-fibers are oriented in the direction perpendicular to the circumferential direction, that is, in the major-axis direction, and the remaining short-fibers are oriented in the direction oblique to the circumferential direction.

2. A balloon catheter according to claim 1, wherein said short-fiber is at least one kind selected from a group consisting of organic short-fibers and inorganic short-fibers.

3. A balloon catheter according to claim 2, wherein said organic short-fiber is a polymer short-fiber.

4. A balloon catheter according to claim 2, wherein said inorganic short-fiber is at least one kind selected from a group consisting of carbon short-fibers and metal short-fibers.

5. A balloon catheter according to claim 4, wherein said carbon short-fiber is made from nanocarbon.

6. A balloon catheter according to claim 4, wherein said short-fiber is one kind selected from a group consisting of nanocarbon tubes and nanocarbon fibers.

7. A balloon catheter according to claim 4, wherein said metal short-fiber is a whisker.

8. A balloon catheter according to claim 1, wherein said composite material is a material in which said short-fibers are uniformly dispersed in said matrix resin.

9. A balloon catheter according to claim 1, wherein said short-fibers are subjected to a surface modifying treatment.

10. A balloon catheter according to claim 1,

wherein said composite material is a material in which said short-fibers are dispersed in said matrix resin by blending said short-fibers in said matrix resin while applying ultrasonic vibration to said short-fibers and said matrix resin.

11. A balloon catheter according to claim 1, wherein said composite material is obtained by blending said short-fibers in a precursor of said matrix resin before polymerization reaction, or in said precursor being during polymerization and thereby having a viscosity lower than a viscosity of the final polymerized product as said matrix resin.